

What is claimed is:

1. An assembly for preparing an intervertebral disc space between a pair of vertebral bodies to receive a prosthesis, the assembly comprising:
a distractor, wherein the distractor comprises a first distracting arm and a second distracting arm; and
a first anchoring fastener for movably coupling the first distracting arm to a first one of the vertebral bodies,
wherein the first anchoring device is rotatable relative to the first distracting arm.
2. The assembly of claim 1 further comprising a second anchoring device for movably coupling the second distracting arm to a second one of the vertebral bodies.
3. The assembly of claim 1 wherein the first and second distracting arms are movable in a parallel relationship, wherein the first anchoring fastener rotatably couples the first distracting arm to the first vertebral body, and further wherein the first vertebral body rotates relative to the first distracting arm as the first and second distracting arms move in a parallel relationship.
4. The assembly of claim 1 further comprising an instrumentation guide attached to the first distracting arm.
5. The assembly of claim 4 wherein the first distracting arm comprises an attachment guide, wherein the instrumentation guide is attached to the first distracting arm by the attachment guide.
6. The assembly of claim 5 wherein the attachment guide is a mechanical connector on the first distracting arm.
7. The assembly of claim 4 further comprising a measurement instrument attached to the instrumentation guide.

8. The assembly of claim 4 further comprising a shaping instrument attached to the instrumentation guide.

9. The assembly of claim 8 wherein the attachment of the shaping instrument to the instrumentation guide is adjustable as the first vertebral body rotates relative to the first distracting arm.

10. The instrumentation guide of claim 8 further comprising a spring-loaded retention assembly for holding the shaping instrument to the instrumentation guide.

11. The assembly of claim 1 wherein the first anchoring fastener comprises a partially spherical portion.

12. The assembly of claim 11 wherein the first distracting arm comprises an elongated slot, wherein the first anchoring fastener engages the elongated slot, and further wherein the spherical portion rotates in the elongated slot relative to the first distracting arm.

13. A method for preparing an intervertebral disc space, between first and second vertebral bodies of a vertebral column, to receive an intervertebral prosthesis, the method comprising:

positioning first and second anchoring fasteners into the first and second vertebral bodies, respectively;

attaching a distractor assembly to the first and second anchoring fasteners, wherein a first arm of the distractor assembly is attached to the first anchoring fastener and a second arm of the distractor assembly is attached to the second anchoring fastener;

moving the first and second arms of the distractor, in parallel, relative to one another;

rotating the first and second vertebral bodies relative to the first and second arms, respectively.

14. The method of claim 13 further comprising shaping an first endplate of the first vertebral body independently of shaping a second endplate of a second vertebral body.

15. The method of claim 14 further comprising attaching a shaping instrument to the first distractor arm prior to shaping the first endplate.

16. The method of claim 13 wherein the first anchoring fastener is pivotable within an elongated slot in the first distractor arm.

17. The method of claim 13 wherein the positioning of the first and second anchoring fasteners is in a sagittal plane.

18. The method of claim 17 wherein the rotation of the first and second vertebral bodies is in the sagittal plane.

19. The method of claim 13 wherein the positioning of the first and second anchoring fasteners is equidistant from the center of the intervertebral disc space.

20. The method of claim 13 wherein attaching the distractor assembly to the first and second anchoring fasteners comprises sliding the first anchoring fastener into a first slot located in the first distractor arm.

21. The method of claim 13 wherein the first slot prevents transverse motion of the first vertebral body with respect to the first distractor arm.

22. An assembly for preparing an intervertebral disc space between first and second vertebral bodies to receive a prosthesis, the assembly comprising:

a distractor, wherein the distractor comprises a first distracting arm in parallel relation to a second distracting arm;

a first anchoring fastener extending between the first distracting arm and the first vertebral body, wherein the first anchoring fastener comprises a first partially spherical portion and the first distracting arm comprises a first slot and further wherein the first partially spherical portion pivotally engages the first slot; and

a second anchoring fastener extending between the second distracting arm and the second vertebral body, wherein the second anchoring fastener comprises a second partially

spherical portion and the second distracting arm comprises a second slot and further wherein the second partially spherical portion pivotally engages the second slot.

23. The assembly of claim 22 further comprising an instrumentation guide attached to the first distracting arm.

24. The assembly of claim 23 further comprising a milling instrument pivotally attached to the instrumentation guide.